



CPUC Transportation Electrification Activities



CPUC ZEV Rate Design Forum
June 7, 2018





CPUC Transportation Electrification Overview

Rates

Infrastructure

Incentives

Vehicle-Grid
Integration

- Provide IOU customer outreach and education
- Ensure safety of utility workers, electric customers, EV drivers
- Collaborate with other state agencies around [ZEV Action Plan](#)





Light-Duty Infrastructure Investments

- IOU programs targeting workplaces, multi-unit dwellings, and long-dwell time destination centers
 - \$197 million
 - 12,500 primarily L2 charging ports
 - Implementation 2016-present
- NRG/EVgo includes public DC Fast Charging stations and make-ready infrastructure for public L2 charging
 - \$102.5 million
 - 200 DCFC stations
 - 3 – 10,000 make-ready stubs





CA Senate Bill 350 (2015)

- Transportation Electrification is defined as using external sources of electrical power for:
 - Vehicles, vessels, trains, boats, and other equipment that are mobile sources of air pollution and greenhouse gases
- Directs CPUC, in coordination with CARB and CEC, to direct IOUs to file applications to accelerate widespread TE
 - **Objectives:** Reduce petroleum usage, meet air quality standards, enable vehicle adoption for low/moderate income, reduce GHGs
 - **Requirements for proposals:** Minimize costs and maximize benefits; avoid unfair competition with non-utilities, include performance accountability measures, be in the interest of ratepayers, provide benefits to disadvantaged communities



3 Large IOUs Approved SB 350 Projects

	Medium/Heavy Duty Infrastructure	Residential Infrastructure	Offroad Infrastructure	Public DC Fast Charging	Taxi/ Shuttle	Education/ Outreach	
	\$592 Million	\$141 Million	\$13 Million	\$30 Million	\$3.2 Million	\$2.3 Million	
SDG&E	Fleet Delivery Services \$3.7 M	Residential Charging Infrastructure \$137 M	Airport Ground Support Equipment \$2.8 M	Electrify Local Highways \$4 M	Green Shuttle \$3.2 M	Car Dealer Incentives \$1.8 M	Total SDG&E Budget: \$155 M
		Residential Grid Integration Rate	MD/HD and Forklift Port Electrification \$2.4 M				
SCE	Transit Bus Make-Ready & Rebate \$4 M	Residential Make-Ready Rebate \$4 M	Port of Long Beach Gantry Crane \$4 M	Urban DC Fast Charger Clusters \$4 M			Total SCE Budget: \$360 M
	MD/HD Charging Infrastructure \$343 M		Port of Long Beach ITS Terminal Yard Tractor \$0.5 M				
	Commercial EV Rate Design						
PG&E	MD/HD Fleet Demonstration \$3.4 M		Idle-Reduction Technology Demonstration \$1.7 M	Fast Charge Infrastructure \$22 M		Home Charger Information \$0.5 M	Total PG&E Budget: \$266 M
	Electric School Bus Renewables Integration \$2.2 M						
	FleetReady Make-Ready Infrastructure \$236 M						

Priority Review
Standard Review
Rate Design Proposals

3 Small IOUs Proposed SB 350 Projects Under CPUC Review

	Public DC Fast Charging	Residential Infrastructure	Commercial Infrastructure	Heavy-Duty Infrastructure	Education & Outreach
	\$4 M	\$1.74 M	\$1.18 M	\$223,000	\$235,000
Bear Valley (\$746,500)		EV TOU Pilot Rate (\$139,000)			
			Destination Make-Ready Rebate (\$607,500)		
Liberty Utilities (\$6.2 M)	DC Fast Charger Project (\$4 million)	Residential Make-Ready Rebate (\$1.6 million)	Small Business Make-Ready Rebate (\$300,000)	EV Bus Infrastructure Program (\$223,000)	Customer Online Resource Project (\$65,000)
PacifiCorp (\$440,000)			Demonstration & Development Grant Program (\$270,000)		Outreach & Education Program (\$170,000)

Priority Review

Standard Review



Other Utility Investments/ Anticipated Applications

- **A.18-01-012**: SDG&E Medium/Heavy Duty Charging Infrastructure Program and Vehicle-to-Grid Electric School Bus Pilot (\$150.6 million as proposed)
- **D.16-01-023**: SCE requesting authorization to spend up to \$22 million more on Phase I of Charge Ready LD infrastructure Program; SCE also directed to file a Phase 2 application for Charge Ready, if warranted from Phase 1 results
- **AB 1082/1083**: 2017 legislation encourages IOUs to propose pilot programs for ZEV infrastructure at schools, state parks, and state beaches
 - Pilot proposals for up to \$10 million under each bill by each IOU
 - Pilots should be two years or shorter
 - Applications due 7/30/2018
 - CPUC to issue decision by 12/31/2018



Please email us with any questions

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